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09/729,262	12/01/2000	Yasushi Murakawa	MAT-8067US	6649

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EXAMINER

TRAN, ELLEN C

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/729,262

Applicant(s)

MURAKAWA, YASUSHI

Examiner

Ellen C. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Detailed Action

1. This action is responsive to communication: amendment filed on 24 March 2005, the original application was filed on 1 December 2000, with acknowledgement of a foreign priority date of 3 December 1999.
2. Due to amendment claims 1-23 are currently pending in this application. Claims 1 and 6 are independent claims. Claims 1 and 6 have been amended. Claim 23 is new.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1 and 6 have been amended to include the text "said second address independent of said first address" the applicant cites the specification page 9, lines 20-21 as supporting this amendment to the claims. The Office disagrees, the applicant is clearly amending claims in an attempt to traverse reference. There is no support in specification for the proposed amendment to the claims. The word "independent" is never stated in the specification.

Response to Arguments

5. Applicant's arguments filed 24 March 2005 have been fully considered but they are not persuasive.

Applicant has amended the claims in an attempt to traverse cited reference Boden et al. U.S. Patent No. 6,615,357 (hereinafter '357). In addition to the 112 rejection stated above. The Office does not agree that '357 does not teach:

a) "assigning a first IP address to a terminal outside said LAN" this is taught in '357 col. 4, lines 51-59 "the user defines a set (in pools 50, 52, and 54) of IP addresses that are available for the exclusive use of the VPN NAT function. Each pool is-preferably definable as a range of IP address, and is naturally associated with remote ID and local ID IP Sec Policy database entities. That is, for each remote ID DB entry and also for each local ID DB entry, the user may optionally specify two IP addresses". The pools are defined beforehand but the specific IP address used is assigned to an outside terminal when it contacts the VPN from outside of the internal network see '357 col. 5, lines 49-65 "When starting an initiator mode connection, the connection manager checks if the local client ID is to be translated. If so, the connection manager looks for an available IP address from NAT pool, say 52, associated with a remote ID in the database. Availability is determined by the connection manger as follows ..."

b) "said second address independent of said first address" is shown in '357 col. 4 lines 60-67 "the different meaning of each flavor of VPN NAT motivating the different pools are set forth. Although specified on a per remote ID or local ID basis, the pools may be managed as three distinct groups of IP addresses".

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As well as further disclosed in '357 col. 7, lines 35 through col. 8, line 16 "Management of IP address availability from the remote ID pool is done by the connection manager based on its set of active connections ... for remotely initiated conversations, at start since NAT requested, implicit MAP rule 188 is created copying IDcr 182 to rhs 184. In step <-1>, the ip address is obtained from appropriate address pool 180 and copied to lhs 186". Note managing the available IP address based on active connections has the same meaning as assigning a second address independently of first address.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language

7. **Claims 1-18 and 23** are rejected under 35 U.S.C. 102(e) as being anticipated by Boden et al. U.S. Patent No. 6,615,357 (hereinafter '357).

As to independent claim 1, "A Virtual Private Network (VPN) communication method employed for a security gateway apparatus connecting between a local area network (LAN) and a wide area network (WAN) including a

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public network, the communication method comprising the steps of:" is taught in '357 col. 2, lines 51-64;

"a) assigning a first IP address to a terminal outside said LAN" is shown in '357 col. 3, line 40 through col. 4, line 26 and col. 5, lines 49-65;

"b) adding a Dynamic Host Configuration Protocol (DHCP) communication option to an Internet Key Exchange (IKE) data, when establishing an IKE communication with a terminal outside the LAN having a connection with the WAN" is shown in '357 col. 4, lines 16-27;

"c) assigning a second IP address from an inside terminal within the LAN to the to the terminal outside the LAN during the IKE communication, said second address independent of said first address" and **"wherein the gateway apparatus designates an IP address for the outside terminal from a tunneled IP packet"** is disclosed in '357 col. 4, line 51 through col. 5, line 65;

"d) establishing a Security Architecture for the Internet Protocol (IPsec) communication that follows the IKE communication, which includes said first IP address and said second IP address, wherein the gateway apparatus designates the first IP address for the outside terminal from a tunneled IP packet" is taught in '357 col. 3, lines 40-65.

As to dependent 2, "wherein an IP address and a subnet mask address, which have same segments as those of the LAN, are distributed to the outside terminal, thereby the outside terminal can be virtually regarded as a terminal on the LAN" is shown in '357 col. 3, lines 45-56.

As to dependent claim 3, “wherein the outside terminal is provided, during the IKE communication, with a private IP address that is used on the LAN, in a case that the LAN is configured with private IP addresses, whereby the outside terminal is allowed to access to a terminal on the LAN” is disclosed in ‘357 col. 4, lines 51-59.

As to dependent claim 4, “wherein an encryption key and an authentication key are exchanged with a public key cryptosystem during the IKE communication” is taught in ‘357 col. 5, line 66 through col. 6, line 9 (“encryption key and an authentication key” same as “SA pair”).

As to dependent claim 5, “wherein the DHCP communication option contains an IP address and a subnet mask” is shown in ‘357 col. 4, lines 16-26 (“option” same as “check box”) (“subnet mask” same as “responder IDci and IDcr NAT flags”).

As to dependent claims 11 and 12, these claims are substantially similar to above claim 4 and are rejected along the same rationale.

As to dependent claims 13 and 14, these claims are substantially similar to above claim 5 and are rejected along the same rationale.

As to independent claim 6, this claim is directed to the security gateway apparatus of the method of claim 1 and is rejected along the same rationale.

As to dependent claims 7-10 and 15-18, these claims contain substantially similar subject matter as claims 2-5 and 11-14 and are rejected along the same rationale.

As to dependent claim 23, “wherein said first IP address is assigned to said terminal from outside LAN” is taught in ‘357 col. 2, lines 51-64.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 19-22** are rejected under 35 U.S.C. 103(a) as being unpatentable over ‘357 in further view of Giniger et al. U.S. Patent No. 6,751,729 (hereinafter ‘729).

As to dependent claim 19,
the following is not taught in ‘357: **“wherein said terminal outside the LAN has a dialup connection with the WAN”** however ‘729 teaches “In various alternative embodiments, different types of communication links 216 are used. For instance, communication link 216 can be part of a broadband cable system such as a cable television system, ... Alternatively, communication link 216 is a dial-up analog or ISDN telephone connection, and communication interfaces 214 and 222 are modems” in col. 10, lines 9-20.

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of ‘357 a method for dynamically generating NAT rules and associating them with the manual or dynamically generated (IKE) Security

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Associations to include a means to utilize dialup connections. One of ordinary skill in the art would have been motivated to perform such a modification to because to increase flexibility when establishing remote connections. As indicated by '729 (see col. 1, lines 33 et seq.) "An important impetus for the adoption of VPN technology by business is the significant cost saving associated with the replacement of expensive remote access servers and associated long distance dial-up changes".

As to dependent claim 20, "wherein said second IP address is automatically distributed from the terminal within the LAN to the terminal outside the LAN during the IKE communication" is taught in '357 col. 5, lines 49-65 "In step 24, initiator mode connections are started. When starting an initiator mode connection, the connection manager checks if the local client ID is to be translated. If so, the connection manager looks for an available IP address for NAT pool".

As to dependent claims 21 and 22, these claims contain substantially similar subject matter as claims 19 and 20; therefore they are rejected along the same rationale.

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Conclusion


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen C Tran whose telephone number is

(571) 272-3842. The examiner can normally be reached from 6:30 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A Morse can be reached on (571) 272-3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ellen Tran
Patent Examiner
Technology Center 2134
2 June 2005



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